

(19) 世界知的所有権機関
国際事務局



(43) 国際公開日
2003 年 10 月 9 日 (09.10.2003)

PCT

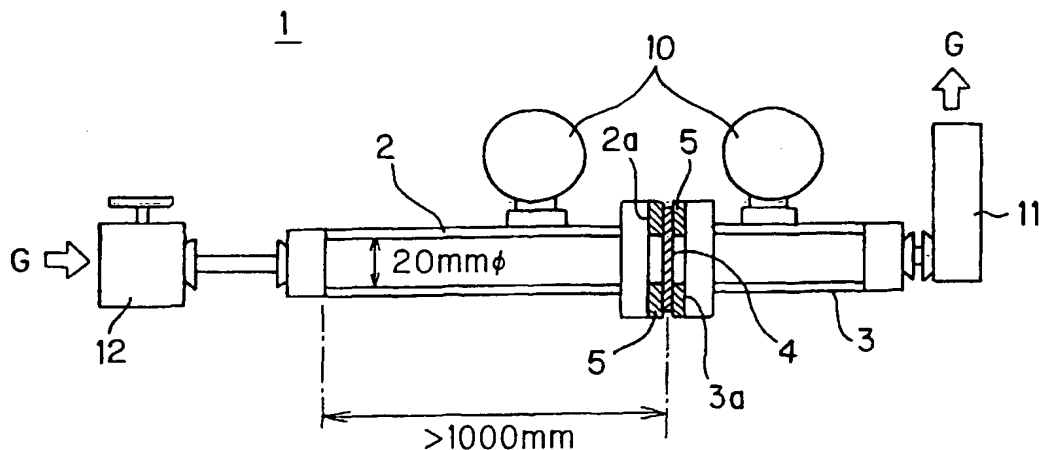
(10) 国際公開番号
WO 03/082772 A1

- (51) 国際特許分類: C04B 38/00, (72) 発明者; および
35/16, B01D 39/20, B01J 21/16 (75) 発明者/出願人 (米国についてのみ): 森本 健司 (MO-
RIMOTO, Kenji) [JP/JP]; 〒467-8530 愛知県 名古屋市
(21) 国際出願番号: PCT/JP03/03860 瑞穂区須田町2番56号 日本碍子株式会社内 Aichi (JP).
(22) 国際出願日: 2003 年 3 月 27 日 (27.03.2003) 井上 勝弘 (INOUE, Katsuhiko) [JP/JP]; 〒467-8530 愛知
県 名古屋市 瑞穂区須田町2番56号 日本碍子株式会
社内 Aichi (JP).
(25) 国際出願の言語: 日本語 (74) 代理人: 渡邊 一平 (WATANABE, Kazuhira); 〒111-
0053 東京都 台東区 浅草橋3丁目20番18号 第8菊星タ
(26) 国際公開の言語: 日本語 ワービル3階 Tokyo (JP).
(30) 優先権データ: (81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB,
特願2002-94113 2002 年 3 月 29 日 (29.03.2002) JP BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK,
(71) 出願人 (米国を除く全ての指定国について): 日本 DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
碍子株式会社 (NGK INSULATORS, LTD.) [JP/JP]; 〒 ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
467-8530 愛知県 名古屋市 瑞穂区須田町2番56号 Aichi LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,
(JP). NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA, ZM, ZW.

[続葉有]

(54) Title: METHOD FOR PRODUCING CORDIERITE-BASED POROUS MATERIAL

(54) 発明の名称: コーディエライト質多孔体の製造方法



(57) Abstract: A method for producing a cordierite-based porous material which uses a raw material generating cordierite which contains an Al source, a Si source and a Mg source and forms cordierite by firing, characterized in that use is made of organic micro balloons containing SiO₂ and Al₂O₃ as a part or the whole of the Al source and the Si source. The method allows the production of a cordierite-based porous material which has a high porosity for open pores and is extremely low in the possibility that it contains a defective portion such as a cut causing the leak of a liquid.

(57) 要約: 本発明のコーディエライト質多孔体の製造方法は、Al源、Si源、及びMg源を含むとともに、焼成することによってコーディエライトを形成するコーディエライト化原料を用いるコーディエライト質多孔体の製造方法であり、Al源、及びSi源の一部又は全部として、SiO₂とAl₂O₃を含有する無機マイクロバルーンを用いることを特徴とし、流体の漏れを生じさせる切れ等の不具合の発生する可能性が極めて低い、高開気孔率のコーディエライト質多孔体を製造することができる。

WO 03/082772 A1



(84) 指定国 (広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

添付公開書類:

— 国際調査報告書

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/03860

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C04B38/00, 35/16, B01D39/20, B01J21/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C04B38/00, 35/16, B01D39/20, B01J21/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 6-116059 A (Matsushita Electric Works, Ltd.), 26 April, 1994 (26.04.94), Page 2, column 1, line 1 to column 2, line 14; page 3, table 1 (Family: none)	1,5,9-10
A	JP 2001-261463 A (Narita Seitosh Co., Ltd.), 26 September, 2001 (26.09.01), Page 2, column 1, lines 1 to 38; page 3, column 3 line 41 to column 4, line 4; page 5, column 8, lines 8 to 49 (Family: none)	1-11

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
20 June, 2003 (20.06.03)

Date of mailing of the international search report
08 July, 2003 (08.07.03)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/03860

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6254963 B1 (DENSO CORP.), 03 July, 2001 (03.07.01), Column 6, line 60 to column 8, line 7 & JP 2000-1365 A Page 2, column 1, lines 1 to 21	1-11